

REMARKS

Claims 3, 6-8, 10-15, 19, 21-24, 27-33, 63, 66-71, 74-78, 80, 81 and 89-97 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,120,503 to Michelson, claims 3, 6-8, 10-12, 19, 23, 24, 27-33, 63, 66-71, 74-78, 80, 81 and 89-97 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,235,059 to Benezech et al., claims 3, 6-12, 15, 19-21, 23, 24, 27-32, 63, 64, 66-71, 73-76, 78-80, 82-85, 87, 89 and 91-96 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,224,631 to Kohrs, and claims 3, 8-12, 18, 24, 28-32, 34, 63-71, 73-85 and 87-90 were rejected as being anticipated by U.S. Patent No. 6,099,531 to Bonutti. Additionally, claims 3, 6-8, 10, 11, 18, 19, 23, 24, 27-33, 63, 65-71, 74-78, 80, 81 and 89-97 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,888,224 to Beckers et al. in view of U.S. Patent No. 6,235,059 to Benezech et al.

Claim Amendments

Independent claims 27 and 76 have been amended to recite further features associated with the claimed invention. Support for the amendments to independent claims 27 and 76 is found, for example, at page 5, lines 7-20; and page 13, lines 1-18 of the as-filed application. Claim 22 has been rewritten in independent form, claims 13 and 14 have been amended to conform to the antecedent basis established in independent claim 76 and/or to improve their form, claims 32 and 33 have been amended to depend from independent base claim 27, and claims 10 and 19 have been amended to depend from independent claim 76. Additionally, claims 6-8, 18, 23, 24, 29, 63, 65-71, 78, 80, 81 and 89-97 have been cancelled without prejudice for possible submission in a continuing application.

Arguments in Support of Patentability

It is well established that “an invention is anticipated if the same device, including all the claim limitations, is shown in a single prior art reference. Every element of the claimed invention must be literally present, arranged as in the claim.” Richardson v. Suzuki Motor Co. Ltd., 9 USPQ.2d 1913, 1920 (Fed. Cir. 1989).

Independent Claim 22

Claim 22 has been rewritten in independent form. The Applicant notes that claim 22 has been solely rejected as being anticipated by Michelson. Specifically, the Office Action generally asserts that “[t]he elongate member defines a pair of arcuate slots positioned diametrically opposite on another relative to the longitudinal axis (see Figures 29-32 and 35)” (See page 4, lines 3-5). However, the Applicant notes that the abbreviated grounds of rejection set forth in the Office Action with regard to claim 22 are merely conclusory, and do not indicate which elements or features of the Michelson implant disclose such features. Accordingly, the grounds of rejection set forth in the Office Action do not establish a *prima facie* case of anticipation with regard to claim 22.

Moreover, the Applicant has examined Figures 29-32 and 35 of Michelson, and submits that none of these figures illustrate or disclose the staple member 512 as having “a pair of arcuate slots . . . sized and configured to receive said tool engaging elements during rotation of said spinal implant about said longitudinal axis”. Indeed, although the staple member 512 includes pins or knobs 532, 534 extending from the top member 514 (see column 14, line 62 to column 15, line 16; Figures 29, 30, 32), the pins/knobs 532, 534 do not constitute “a pair of arcuate slots”. Moreover, the Applicant notes that no portion of the staple member 512 defines any structure that could reasonably be construed as constituting “a pair of arcuate slots”.

For at least the reasons set forth above, the Applicant submits that a *prima facie* case of anticipation has not been established with regard to claim 22. Accordingly, the Applicant respectfully requests withdrawal of the rejection of independent claim 22 and allowance of the same.

Independent Claims 27 and 76

Independent claim 27 recites, among other elements and features, that the device has “a substantially rectangular transverse cross section and includes a rounded transitional surface at diagonally opposite corner portions of said device extending between said pair of primary side surfaces and said pair of secondary side surfaces to facilitate rotation of said device within the intervertebral space about said longitudinal axis”, “an elongate member sized to span the intervertebral space and a plurality of bone anchors extending transversely from said elongate

member and into engagement with the adjacent vertebral bodies”, “wherein said device is rotatably coupled with said elongate member by a fastener including a threaded shank extending through a passage in said elongate member, wherein tightening said fastener interlocks said device with said elongate member to selectively prevent rotational movement of said device relative to said elongate member subsequent to alignment of said primary transverse dimension along said select height of the intervertebral space”, and “wherein said device comprise an intervertebral fusion device including a hollow interior with openings extending through said second pair of side surfaces and in communication with said hollow interior”.

Independent claim 76 similarly recites, among other elements and features, that the spinal implant has “a substantially rectangular transverse cross section and includes a rounded transitional surface at diagonally opposite corner portions of said spinal implant extending between said first pair of side surfaces and said second pair of side surfaces to facilitate rotation of said spinal implant within the intervertebral space about said longitudinal axis”, “an elongate member sized to span the intervertebral space and a plurality of bone anchors extending transversely from said elongate member and into engagement with the adjacent vertebral bodies”, “wherein said spinal implant is rotatably coupled with said elongate member by a fastener including a threaded shank extending through a passage in said elongate member, wherein tightening said fastener interlocks said spinal implant with said elongate member to selectively prevent rotational movement of said spinal implant relative to said elongate member subsequent to alignment of said primary transverse dimension along said select height of the intervertebral space”, and “wherein said spinal implant comprises an intervertebral fusion device including a hollow interior with openings extending through said second pair of side surfaces and in communication with said hollow interior”.

With regard to Michelson, Benezech, Kohrs, Bonutti, Beckers and Benezech, the Applicant submits that none of these references disclose or suggest a device/spinal implant that is rotatably coupled with an elongate member by “a fastener including a threaded shank extending through a passage in said elongate member, wherein tightening said fastener interlocks said device/spinal implant with said elongate member to selectively prevent rotational movement of said device/spinal implant relative to said elongate member subsequent to alignment of said primary transverse dimension along said select height of the intervertebral space”.

Furthermore, with specific regard to Michelson, even assuming arguendo that the embodiment illustrated in Figures 29-33 could be construed as including a device/spinal implant having “a substantially rectangular transverse cross section”, the spinal implant 540 does not include “a rounded transitional surface at diagonally opposite corner portions of said device extending between said pair of primary side surfaces and said pair of secondary side surfaces to facilitate rotation of said device within the intervertebral space about said longitudinal axis”. Albeit that the planar upper/lower surfaces and the planar side surfaces appear to cooperate with one another to provide the implant 540 with “a substantially rectangular transverse cross section”, the implant 540 does not include “a rounded transitional surface at diagonally opposite corner portions of said device” that extend between the planar upper/lower surfaces and the planar side surfaces to facilitate rotation of the implant 540 within the intervertebral space. Instead, the planar upper/lower surfaces meet the planar side surfaces at a ninety degree angle to provide the implant with right-angle corners, and not “a rounded transitional surface”.

Furthermore, although the planar upper/lower surfaces of the implant 540 (i.e., the surfaces of the implant defining a first transverse dimension) appear to include a series of openings extending therethrough that communicate with a hollow interior of the implant (see Figures 31 and 32), the planar side surfaces of the implant 540 (i.e., the surfaces of the implant defining a second transverse dimension “greater than said first transverse dimension”) do not define any openings that communicate with the hollow interior of the implant 540. Instead, the planar side surfaces of the implant 540 are solid/non-perforated and are devoid of openings that communicate with the implant’s interior.

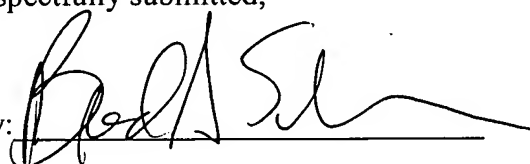
For at least the reasons set forth above, the Applicant respectfully requests withdrawal of the rejection of independent claims 27 and 76 and allowance of the same. Claims 28 and 30-33 depend from independent claim 27 and are submitted to be patentable for at least the reasons supporting the patentability of independent base claim 27. Claims 3-5, 10-16, 19-21, 74, 75 and 77 depend from independent claim 76 and are submitted to be patentable for at least the reasons supporting the patentability of independent base claim 76.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the Applicant's application is now in condition for allowance with pending claims 3-5, 10-16, 19-22, 27, 28, 30-33 and 74-77.

Reconsideration of the subject application is respectfully requested. Timely action towards a Notice of Allowability is hereby solicited. The Examiner is encouraged to contact the undersigned by telephone to resolve any outstanding matters concerning the subject application.

Respectfully submitted,

By: 

Brad A. Schepers
Reg. No. 45,431
Krieg DeVault LLP
One Indiana Square, Suite 2800
Indianapolis, Indiana 46204-2079
(317) 238-6334 (voice)